Environ Health Perspect
DOI: 10.1289/ehp.1409529

Supplemental Material

Modification of Heat-Related Mortality in an Elderly Urban Population by Vegetation (Urban Green) and Proximity to Water (Urban Blue): Evidence from Lisbon, Portugal

Katrin Burkart, Fred Meier, Alexandra Schneider, Susanne Breitner, Paulo Canário, Maria João Alcoforado, Dieter Scherer, and Wilfried Endlicher

Table of Contents

building density, proportion of college graduates and percentage of population receiving social benefits. Daytime LST quartiles were 32.3°C, 33.8°C and 35.0°C.

Figure S3: Difference in mortality increase among those > 65 years of age with a 1°C increase in temperature above the 95th (a) and 99th (b) percentiles lags 0-2 for NDVI quartiles with 95% confidence intervals. GAMs allowing for interaction between temperature and different NDVI classes were adjusted for long-term and seasonal trend (6 df per year), daily averages of O_3 and PM_{10} (lag 0-1), percent of parish population >65 years of age, building density, proportion of college graduates and percentage of population receiving social benefits.

Figure S4: Difference in mortality increase among those > 65 years of age with a 1°C increase in temperature above the 95th (a) and 99th (b) percentile for lags 0-2 for areas with a distance of > 4 km and ≤ 4 km to the Atlantic Ocean and Tagus Estuary with 95% confidence intervals. GAMs allowing for interaction between temperature and distance classes were adjusted for long-term and seasonal trend (6 df per year), daily averages of O3 and PM10, percent of parish population >65 years of age, building density, proportion of college graduates and percentage of population receiving social benefits.

Figure S5: Difference in mortality increase among those > 65 years of age with a 1°C increase in UTCI above the 95th (a) and 99th (b) percentiles lags 0-2 for nightime LST quartiles with 95% confidence intervals. GAMs allowing for interaction between UTCI and different nighttime LST classes were adjusted for long-term and seasonal trend (6 df per year), daily averages of O_3 and PM_{10} (lag 0-1), percent of parish population >65 years of age, building density, proportion of college graduates and percentage of population receiving social benefits. Nighttime LST quartiles were 16.6°C, 17.7°C and 18.1°C.

Figure S6: Difference in mortality increase among those > 65 years of age with a 1°C increase in UTCI above the 95th (a) and 99th (b) percentiles lags 0-2 for daytime LST quartiles with 95% confidence intervals. GAMs allowing for interaction between UTCI and different daytime LST classes were adjusted for long-term and seasonal trend (6 df per year), daily averages of O_3 and PM_{10} (lag 0-1), percent of parish population >65 years of age, building density, proportion of college graduates and percentage of population receiving social benefits. Daytime LST quartiles were 32.3°C, 33.8°C and 35.0°C.